Form A - Notice of Intent to Bid

Date: 22-Nov-06

Our organization intends to submit a proposal in response to the Delmarva Power & Light Request for Proposals for Generation Capacity and Power Purchase Agreement:

Contact Name: Morten Sissener - Director of Development - Northeast

Name of Firm: NRG Energy, Inc.

Address: 211 Carnegie Center

Princeton, NJ 08540

Phone: 609.651. 6698 (cell) 609.524.4898 (office)

e-mail: morten.sissener@nrgenergy.com

Alternate Contact Name: Caroline Angoorly - Vice President Development & Counsel - Northeast

Address: NRG Energy, Inc.

211 Carnegie Center

Princeton, NJ 08540

Phone: 609.647.9624 (cell) 609.524.4645 (office)

e-mail: caroline.angoorly@nrgenegy.com

Project Description: See attachment hereto

(include technology type, incremental facility capacity (MW), expected capacity factor and interconnection point (PJM bus #))

Signature: Morten Sissener

Digitally signed by Morten Sissener
DN: cn=Morten Sissener, c=US, o=NRG Energy, Inc., ou=Northeast Region, email=morten.sissener@nrgenergy.com
Date: 2006.11.30 20:23:05 -05'00'

Please return via FAX, U.S. Mail, or email no later than Wednesday November 22, 2006 to

Lezael Rorie
ICF International
9300 Lee Highway
Fairfax, VA 22031
FAX: (703) 934-3968
E-Mail: dpl_rfp@icfi.com

and
Barry J. Sheingold
New Energy Opportunities
125 Powers Road
Sudbury, MA 01776
FAX; (978) 440-7654
E-Mail: bjs@newenergyopps.com

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Form A – Notice Of Intent To Bid
Project Description
Nov.22.06

NRG Energy, Inc. ("NRG"), through its special purpose entity, Indian River IGCC LLC (the "Project"), intends to propose to supply 400 MW of innovative baseload generation through the construction of a new 580 MW Integrated Gasification Combined Cycle ("IGCC") project at its existing Indian River generating plant site located at Millsboro, Delaware. This will be a new (fifth) unit at the Indian River plant. Coal will be the primary feedstock for the gasification system.

The nominal expected equivalent availability factor ("EAF") for the Project is 85%. However, NRG reserves the right to bid a prudent initial EAF ramp-up profile starting at a lower initial expected EAF and to also propose a lower ultimate targeted EAF. The 85% EAF value being provided here is for guidance only.

The proposed Project would require a new interconnection to an existing substation/switchyard. The Project would be interconnected at the PJM Bus #9171 at or adjacent to the existing Indian River 230kV substation/switchyard. The PNODE ID is 93149 at substation INDIANRI located within the DPL transmission zone. The Project would have 2 identical gas turbine generators and a single steam turbine generator.

The new generators' switchyard would consists of either a 12 breaker and half or 7 breaker ring bus configuration necessary for electrical connection of the gas and steam turbine generators, auxiliary station load and 230kV strain bus ties to the DPL Indian River Substation. This equipment would be owned and maintained by the Project. The Point of Interconnection at the DPL Indian River 230kV substation would require at least one additional 230kV breaker and the upgrade of the rigid 230kV bus. This equipment would be owned and maintained by DPL.

[Paragraph intentionally redacted]

PJM has completed the Interconnection Feasibility Study for the Project and NRG has submitted the subsequent application for System Impact Study to PJM. The PJM Queue position for the feasibility study is #Q42 and the study is available off the PJM website at https://www.pjm.com/planning/project-queues/queue-gen-active.jsp. The PJM feasibility study report has also been provided as an attachment hereto. Please note that the PJM studies were based on an earlier preliminary 630 MW Project size which, after additional engineering, is now 580 MW.

#Q42 Indian River 630 MW

Generator Interconnection

This analysis was completed to assess the reliability impact for a new generator interconnecting to the PJM System as a Capacity Resource.

Network Impacts

The Queue Q42 project was studied as a **630 MW (Net) Capacity injection into the Indian River 230 kV substation**. Q42 was evaluated for compliance with reliability criteria for summer peak conditions in 2011. Potential network impacts were as follows:

Generator Deliverability (Single Contingency)

1. Indian River 230kV bus ties #1 and #2 are contingency overloaded at **106% (2124 Amps or 846 MVA**) for loss of one bus tie on the other. The bus ties are rated (summer emergency) for 2000Amps (**796 MVA**).

2. The segment of 230kV line 220-46 from Ridley to Printz contingency loading increases from 99% (prior to Q42) to **102%** (after the addition of Q42) of its emergency rating (**1432 MVA**) for the outage of the Eddystone to Island Rd 230 kV line 220-23. Q42 generation contributes **41 MW** to the contingency loading of line 220-46.

Multiple Facility Contingency

(Double Circuit Towerline contingencies only. Stuck breaker and bus fault contingencies will be performed for the Impact Study)

No problems identified.

Short Circuit

No problems identified for the PJM transmission system or the Delmarva underlying system.

NRG circuit breaker "Indian River 69kV CB7060" was identified as being overstressed at 104.2% of short circuit interrupting rating as a result of adding Q42. NRG should consider replacement of CB7060.

New System Reinforcements

1. The estimated cost to upgrade Indian River 230 kV bus ties #1 and #2 is **$414,000**. Estimated construction time is **12 months**.

2. The segment of 230kV line 220-46 from Ridley to Printz is limited by terminal equipment at Printz. The estimated upgrade cost is **$800,000.** Estimated construction time is **18 months**.

Contribution to Previously Identified Overloads

(Overloads initially caused by prior Queue positions with additional contribution to overloading by Queue Q42. Queue 42 will have a % allocation cost responsibility which will be calculated and reported for the Impact Study)

3. Queue Q42 contributes approximately 39 MW, or approximately 4% of the 1000 MVA emergency rating, to the contingency loading of the Bridgewater-Sommerville-Flagtown-Branchburg 230 kV line for the tower outage of 230 kV lines Atlantic-Larrabee and Atlantic-Smithburg. At Q42 position in the Queue the contingency loading of the Bridgewater-Sommerville-Flagtown-Branchburg 230 kV line is at 119% of its emergency rating (1000 MVA after PSE&G required baseline upgrades b169 and b170 are performed).

   This thermal reliability criteria violation was originally caused by queue position O66 and additional contributions to the overload were added by Queues P04, P06, and Q26 prior to Queue Q42. To date additional contributions to the overload were also determined for Q47, Q73 and Q74.

Bridgewater-Sommerville-Flagtown-Branchburg 230kV

Queue Project	MW Contribution	Final Loading
Up to O66	60 (above 1000MVA)	106%
P04	29	109%
P06	25	111%
Q26	37	115%
Q42	39	119%
Q47	7	118%
Q73	1	118%
Q74	55	125%

   PSE&G is responsible for the Bridgewater-Sommerville-Flagtown-Branchburg 230 kV baseline upgrades b169 and b170 to increase the circuit emergency rating to 1000 MVA. This involves reconductoring of this 12.5 mile circuit with 1590 KCMIL ACSS conductor at an estimated cost of $22M. To increase the circuit rating to 1255 MVA (necessary to accommodate projects up to Q74) will require reconductoring the circuit with a bundle of two 1033 KCMIL ACSS conductors and rebuild (extent not determined at this time) of some structures. The estimated additional cost to upgrade from 1000 MVA to 1255 MVA is estimated to cost **$25.0M**. **Queue Q42 may have a cost allocation responsibility.**

4. Queue Q42 contributes 17 MW to the contingency loading of the English 230/115 kV transformer for the tower outage of 230 kV lines Atlantic-Larrabee and Atlantic-Smithburg. At Q42 position in the Queue the contingency loading of the English 230/115 kV transformer is at 125% of its emergency rating (292 MVA).

This thermal reliability criteria violation was originally caused by queue position O66 and additional contributions to the overload were added by Queues P06 and Q26 prior to Queue Q42. To date additional contributions to the overload was also determined for Q74.

English 230/115 kV Transformer Contingency Loading

Queue Project	MW Contribution	Final Loading
Up to O66	26 (above 292 MVA)	109%
P06	13	113%
Q26	18	120%
Q42	17	125%
Q74	17	131%

The estimated total cost to replace the English 230/115 kV 292 MVA (emergency rating) transformer with a 385 MVA (emergency rating) is **$ 4.0M. Queue Q42 may have a cost allocation responsibility.**

There are a number of network reinforcements required to mitigate thirty separate thermal overloads identified for the Queue O66 project in New Jersey. Project Q42 contributes (in excess of the threshold for cost allocation – see PJM Tariff) to only two of the thirty thermal overloads as described above; however, as the reinforcements for the thirty overloads have not yet been determined, an assessment of the impact of Q42 on the reinforcements required by Queue O66 was not able to be performed. Evaluation of Queue Q42's impacts on the O66 reinforcements will be performed during the Q42 Impact Study if Queue O66 and Q42 remain in the PJM Generation Interconnection Queue at that time. It is unlikely, but possible, that Queue Q42 will have an impact on the reinforcements for Queue O66.

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Potential Issues

Prior to the addition of Q42 the Island Road to Eddystone 230 kV line 220-23 was contingency loaded to 96% of its emergency rating (1411 MVA) for the outage of the Mc Dade-Ridley-Morton 230 kV line 22046. After the addition of Queue Q42 the Island Road to Eddystone 230 kV line 220-23 was contingency loaded to 99% of its emergency rating. Queue Q42 contributes 43 MW to the increased loading of this facility.

5. The limiting elements for 220-23 line are 230kV circuit breakers and terminal equipment. If required, the upgrade cost is estimated at **$800,000**. Estimated construction time is **18 months**.

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